

The University of Texas at Tyler
Bachelor of Science in Computer Information Systems

Syllabus

Course Number:	COSC 2325
Course Title:	Foundation of Computer Information Systems
Course Description:	This course provides a thorough introduction to graphical user interface programming using visual programming tools. After this course students will be proficient in developing windows programs.
Pre-requisites:	COSC 1310, COSC 1336/1136
Credits:	3
Text(s):	Stair and Reynolds, <i>Fundamentals of Information Systems</i> , Second Edition (0-619-06491-9). Knowlton, Thompson, & Collings, <i>Microsoft Visual Basic.NET Basics</i> (0-619-18299-7).
Languages Used: (If applicable)	The keyword in this course's title is Foundation ; therefore, a major element includes the development and use of applications software. This course demonstrates key components of application software, which include: <ul style="list-style-type: none"> • Relational databases with an introduction to SQL and VBA. • Programming emphasizing modularity, naming conventions, and error trapping using VB.NET, ASP.NET, and ADO.NET. • Effective graphical user interfaces, emphasizing both multiple document and single document interfaces. • Application software that provide users with decision- and planning-oriented information.
Topics:	<ul style="list-style-type: none"> • Introduction to Information Systems in organizations. • Hardware and software. • Organizing data and information. • Application software. • .NET Framework. • Telecommunications, Internet, Intranets, and Extranets. • Electronic commerce and transactions processing systems. • Information and decision support systems. • Specialized information systems: <ul style="list-style-type: none"> ○ Artificial intelligence. ○ Expert systems. ○ Virtual reality. • Systems development. <p>Security, privacy, and ethical issues in information systems and the Internet.</p>
Additional Materials:	<ul style="list-style-type: none"> • On occasion, if some concept or technique is difficult to understand, handouts are provided to enhance and extend material presented in class. • Parts of the lecture material include concepts not covered in the textbook, such as computer ethics, specific needs applicable to the business world, and quality assurance.

Evaluation Method: (only items in dark print apply)	
1. Examination/Quiz	2. Homework
3. Paper/Report	4. Computer Program
5. Project	6. Presentation
7. Class Participation	8. Peer Review

Course Objectives¹: By the end of this course students are expected to:	
1.	To identify the basic types of information systems and discuss who uses them, how they are used for competitive advantage, and what kind of benefits they deliver. [1,2,4]
2.	To define the major milestones of systems development and state the goals of each. [1,2,3,4]
3.	To apply basic approaches to the development of application software. [1,3]
4.	To identify and apply the common functions performed by relational databases. [1,2,3,4]
5.	To describe the function of components of telecommunication systems. [1,2,3,4]
6.	To identify the basic structure and use of e-commerce systems, and discuss the advantages and disadvantages of enterprise resource planning (ERP) systems. [1,2,3,4]
7.	To describe the basic components and utilization of decision support systems (DSS), group decision support systems (GDSS), and executive support systems (ESS). [1,2,3,4]
8.	To associate the benefits of artificial intelligence, expert systems, and virtual reality to decision making and performance enhancement. [1,2,3,4]
9.	To state the purpose of systems development methodologies. [1,2,3,4]
10.	To explain the types and effects of computer crime. [1,2,5]
11.	To describe policies and procedures useful in eliminating waste and mistakes. [1,2]
12.	To discuss the role of ethics in the information systems profession. [4]

Relationship to Program Outcomes: (only items in dark print apply)²	
This course supports the following Computer Information Systems Program Outcomes, which state that our students at the time of graduation are expected to:	
1. Be prepared to contribute immediately as information systems professionals. [1-12]	
2. Be able to design and implement information systems that satisfy user requirements. [1-12]	
3. Demonstrate effective written, visual, and oral communication skills.[4,5,6,7,8,9,10,11,12]	
4. Understand the global context in which computer information systems are practiced including:	
a. Contemporary issues related to business and technology	
b. The impact of computers on society	
c. The role of ethics in the practice of information systems profession. [10,11,12]	
5. Be able to contribute effectively as members of systems development teams.[1-12]	
6. Recognize the need to pursue continued learning throughout their professional careers.[1-12]	
² Numbers in brackets refer to course objective(s) that address the Program Outcome.	

Prepared By: John Burch	Date: 11/10/2004
	Revised: